

WHAT IS CLAIMED IS:

1. A moving picture reproducing device which decodes compressed moving picture into decoded image displayed on a display device, comprising:

a plurality of decoding units each of which decodes the compressed moving picture in a resolution which is different from resolutions of the other decoding units;

a display size obtaining unit which obtains a display size of image displayed on the display device; and

a decoding unit selecting unit which selects a decoding unit to decode the compressed moving picture, from the plurality of decoding units according to the display size obtained by the display size obtaining unit.

2. The moving picture reproducing device of claim 1, wherein the decoding unit selecting unit newly selects the decoding unit whenever the selected decoding unit decodes a predetermined amount of the compressed moving pictures.

3. The moving picture reproducing device of claim 1, wherein when the selected decoding unit decodes the compressed moving picture in a resolution which is lower than an original resolution of the compressed moving picture, the decoding unit decodes them by reducing an order of IDCT (Inverse Discrete Cosine Transformation) and performing motion compensation according to the reduced order of IDCT.

4. The moving picture reproducing device of claim 1 further including a display size storing device which stores the display size used when the previous decoding process is completed, wherein the decoding unit selecting unit selects, at the beginning of current

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decoding process, one of the decoding units according to the display size stored in the display size storing device.

5. The moving picture reproducing device of claim 2, wherein the moving picture is compressed based on MPEG and the decoding unit selecting unit selects the decoding unit for each GOP (Group of Picture).

6. The moving picture reproducing device of claim 5, wherein the decoding unit selecting unit selects, at the beginning of decoding process of current GOP, a decoding unit used in the decoding process of the previous GOP, when a B picture in the current GOP includes information related to an I picture and a P picture of the previous GOP.

7. A moving picture reproducing device which decodes compressed moving picture and provides the decoded image to a display device, comprising:

a luminance decoding unit which decodes luminance component in the compressed moving picture; and

a color-difference decoding unit which decodes color-difference component in the compressed moving picture, wherein the luminance decoding unit decodes the compressed moving picture in a resolution which is lower than a resolution used by the color-difference decoding unit.

8. A method of decoding moving picture comprising the steps of:

obtaining a display size of an image displayed on a display device;

selecting a resolution to decode the compressed moving picture from different resolutions, according to the display size obtained by the obtaining step; and

decoding the compressed moving picture in the selected resolution.

9. The method of claim 8, wherein the selecting step newly selects the resolution whenever a predetermined amount of the compressed moving pictures are decoded by the decoding step.

10. The method of claim 8, wherein when the decoding step decodes the compressed moving picture in a resolution which is lower than an original resolution of the compressed moving picture, the decoding step decodes them by reducing an order of IDCT (Inverse Discrete Cosine Transformation) and performing motion compensation according to the reduced order of IDCT.

11. The method of claim 8, further comprising a step of storing the display size used when the previous decoding process is completed, wherein the selecting step selects, at the beginning of current decoding process, one of the different resolutions according to the stored display size.

12. The method of claim 9, wherein the moving picture is compressed based on MPEG and the selecting step selects the resolution for each GOP (Group of Picture).

13. The method of claim 12, wherein the selecting step selects, at the beginning of decoding process of current GOP, a resolution used in the decoding process of the previous GOP, when a B picture in the current GOP includes information related to an I picture and a P picture of the previous GOP.

14. A method of decoding moving picture comprising the steps of:

decoding luminance component in the compressed moving picture; and

decoding color-difference component in the compressed moving picture, wherein the step of decoding luminance component decodes the compressed moving picture in a resolution which is lower than a resolution used by the step of decoding color-difference component.

15. A computer data signal embodied in a carrier wave and representing a sequence of instructions which, when executed by a processor, cause the processor to perform a method of decoding moving picture, the method comprising the steps of:

obtaining a display size of image displayed on a display device;

selecting a resolution to decode the compressed moving picture from different resolutions, according to the display size obtained by the obtaining step; and

decoding the compressed moving picture in the selected resolution.

16. A computer data signal embodied in a carrier wave and representing a sequence of instructions which, when executed by a processor, causes the processor to perform a method of decoding moving picture, the method comprising the steps of:

decoding luminance component in the compressed moving picture; and

decoding color-difference component in the compressed moving picture, wherein the step of decoding luminance component decodes the compressed moving picture in a resolution which is lower than a resolution used by the step of decoding color-difference component.